In the Claims

1-20. (Canceled)

21. (Previously presented) An imaging device comprising:

a color filter array configured to generate a first set of red-green-blue (RGB) values from light incident upon the color filter array;

a first analog processing and analog-to-digital (A-D) conversion unit configured to receive the first set of RGB values and generate in response thereto, a set of digital RGB signals;

a color sensor that is independent of the color filter array, the color sensor configured to generate a second set of RGB values from light incident upon the color sensor;

a second analog processing and A-D conversion unit configured to receive the second set of RGB values and generate in response thereto, a set of average RGB signals; and

a white balance unit configured to generate white balance information from the set of average RGB signals generated by the second analog processing and A-D conversion unit.

22. (Previously presented) The imaging device of claim 21, further comprising:

a color interpolation unit configured in part, to receive the set of average RGB signals generated by the second analog processing and A-D conversion unit and forward the set of average RGB signals to the white balance unit without further processing, thereby eliminating a processing time in the color interpolation

unit.

23. (Previously presented) The imaging device of claim 22, wherein the set of average RGB signals is a digital set of average RGB signals.

24. (Previously presented) An imaging device comprising:

a first image processing path comprising:

a color filter array configured to generate a first set of red-green-blue (RGB) values from light incident upon the color filter array; and

a first analog processing and analog-to-digital (A-D) conversion unit configured to receive the first set of RGB values and generate in response thereto, a set of RGB signals;

a second image processing path that is parallel to, and independent of, the first image processing path, the second image processing path comprising:

a color sensor that is independent of the color filter array, the color sensor configured to generate a second set of RGB values from light incident upon the color sensor; and

a second analog processing and analog-to-digital (A-D) conversion unit configured to receive the second set of RGB values and generate in response thereto, a set of average RGB values; and

a common image processing path comprising:

a white balance unit configured to generate white balance information from the set of average RGB values generated by the second analog processing and A-D conversion unit; and

a color interpolation unit configured to receive the set of average RGB values generated by the second analog

processing and A-D conversion unit and forward the set of average RGB values to the white balance unit without further processing, thereby eliminating a processing time in the color interpolation unit.

25. (Previously presented) A method of imaging, the method comprising:

providing a color filter array;

providing a color sensor that is independent of the color filter array;

generating a first set of red-green-blue (RGB) values from light incident upon the color filter array;

converting the first set of RGB values into a set of digital RGB signals;

generating a second set of RGB values from light incident upon the color sensor, the second set of RGB values being independent of the first set of RGB values;

converting the second set of RGB values into a set of average RGB signals;

providing a color interpolation unit;

propagating the set of average RGB signals through the color interpretation unit without processing in the color interpretation unit, thereby eliminating a processing time in the color interpolation unit;

providing a white balance unit; and

receiving in the white balance unit, the set of average RGB signals from the color interpolation unit; and

generating in the white balance unit, white balance information from the set of average RGB signals.

26. (Previously presented) The imaging device of claim 21, wherein the first set of RGB values provides pixel-level

information of a captured image and the second set of RGB values provides proportion information between the red, green and blue components in light incident upon the color sensor.

27. (Previously presented) The imaging device of claim 26, wherein the proportion information comprises a first voltage representing a proportion of the red component, a second voltage representing a proportion of the green component, and a third voltage representing a proportion of the blue component.

28. (Previously presented) The imaging device of claim 27, wherein each of the first, second, and third voltages is a DC voltage derived from a supply voltage of the color sensor.

29. (Previously presented) The imaging device of claim 27, wherein the set of average RGB signals generated by the second analog processing and A-D conversion unit comprises a digital representation of each of the first, second, and third voltages.

30. (Previously presented) The imaging device of claim 27, wherein the color sensor comprises:

a red color filter coupled to a first photo sensor, the red color filter selected to propagate the red component in light incident upon the color sensor;

a green color filter coupled to a second photo sensor, the green color filter selected to propagate the green component in light incident upon the color sensor; and

a blue color filter coupled to a third photo sensor, the blue color filter selected to propagate the blue component in light incident upon the color sensor.

31. (Previously presented) The imaging device of claim 26, wherein the set of digital RGB signals generated by the first analog processing and A-D conversion unit comprises digital RGB values for each pixel in the captured image.

32. (Previously presented) The method of claim 25, wherein generating the first set of RGB values comprises generating pixel-level information of a captured image and generating the second set of RGB values comprises generating proportion information between the red, green and blue components in light incident upon the color sensor.

33. (Previously presented) The method of claim 32, wherein generating of proportion information comprises generating of a first voltage representing a proportion of the red component, generating a second voltage representing a proportion of the green component, and generating a third voltage representing a proportion of the blue component.

34. (Previously presented) The method of claim 33, wherein converting the second set of RGB values into the set of average RGB signals comprises generation of a digital representation of each of the first, second, and third voltages.

35. (Previously presented) The method of claim 33, further comprising:

coupling a DC voltage into the color sensor; and

generating the first, second, and third voltages from the DC voltage.

36. (Previously presented) The method of claim 33, wherein providing the color sensor comprises:

coupling a red color filter to a first photo sensor, the red color filter selected to propagate the red component in light incident upon the color sensor;

coupling a green color filter to a second photo sensor, the green color filter selected to propagate the green component in light incident upon the color sensor; and

coupling a blue color filter to a third photo sensor, the blue color filter selected to propagate the blue component in light incident upon the color sensor.

37. (Previously presented) The method of claim 32, generating the first set of RGB values comprises capturing pixel-level information of an image; and wherein converting the first set of RGB values into the set of digital RGB signals comprises generating digital RGB values for each pixel in the image.

38. (Previously presented) The imaging device of claim 24, wherein the first set of RGB values provides pixel-level information of a captured image and the second set of RGB values provides proportion information between the red, green and blue components in light incident upon the color sensor.

39. (Previously presented) The imaging device of claim 38, wherein the proportion information comprises a first voltage representing a proportion of the red component, a second voltage representing a proportion of the green component, and a third voltage representing a proportion of the blue component.

40. (Previously presented) The imaging device of claim 38, wherein the set of RGB signals generated by the first analog processing and A-D conversion unit represents digital RGB

values for each pixel in the captured image.